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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,027	12/11/2003	Machiel Goedhart	C7736(V)	2361

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EXAMINER	
PATEL, RITA RAMESH	
ART UNIT	**PAPER NUMBER**
1792	

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10/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,027	GOEDHART ET AL.	
	Examiner	Art Unit	
	Rita R. Patel	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-16 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-16 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *10/17/07*.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Applicant's Arguments / Amendments

This Office Action is responsive to the amendment after final filed on 10/2/07. Claims 1, 3-16 and 19 are pending. Claims 2, 17, and 18 have been cancelled. The former 35 USC 102(e) and 35 USC 103(a) rejections based on Conrad et al. (US2005/0091755) has been overcome by Applicant's proper showing of an Affidavit under 37 CFR 1.131.

However, upon further search and consideration, the instant claims have been rejected, as indicated herein. Thus claims 1, 3-16, and 19 are rejected.

Claim Objections

Claims 7 and 8 are objected to because of the following informalities: in line these claims there is written "first advanced cleaning cycle", however this appears to be a typo; for the purposes of examination the Examiner will assume it to read as "first advanced solvent refining cycle". Appropriate correction is required.

Claims 10 and 11 are objected to because of the following informalities: in line these claims there is written "second advanced cleaning cycle", however this appears to be a typo; for the purposes of examination the Examiner will assume it to read as "second advanced solvent refining cycle". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 recites the limitation "first replenishable means" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "second replenishable means" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-10, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Estes et al. herein referred to as "Estes" (US Patent No. 6,045,588).

Estes teaches a non-aqueous clothes washing apparatus that uses a working fluid from a group consisting of perfluorocarbons, hydrofluoroethers, fluorinated hydrocarbons and fluoroinerts. More specifically, in Figure 10 of Estes, a capture of the solvent mixture 138 is shown to lead to filtration of the liquid therein by gravity separation 139 (basic solvent refining cycle) which then emits a first fraction (first solvent fraction) to the filter IWF fluid 140 (a second advanced solvent refining cycle)

and a second fraction (second solvent fraction) to increase temperature to hydrophilic boiling point 142 (a first advanced solvent refining cycle/evaporation).

In re claims 7 and 9, Applicant's claims for a "first and second replenishable means" is merely an intended use of the application, as indicated on page 8, lines 9-12 of the Specification, the filter may be replaced whenever desired; replacement of a filter by hand is fully capable of being performed in the invention of Estes. Applicant's recitation for a replenishing means is arguably just the manual replacement of a filter; it is well settled that the intended use of a claimed apparatus is not germane to the issue of the patentability of the claimed structure. If the prior art structure is capable of performing the claimed use then it meets the claim. *In re Casey*, 152 USPQ 235, 238 (CCPA 1967); *In re Otto*, 136 USPA 459 (CPA 1963). Applicant's claims for a "first and second replenishable means" provide no distinct or further structural claim limitations over Estes.

Additionally, Applicant's claims for a "first, second, and third predetermined conditions" fail to necessitate any structural requirements; these predetermined conditions may read on a volumetric flow rate, a volume of liquid, a pressure, a temperature, an on/off status of the machine, a wash cycle, a user input, etc. Insofar as the Estes invention, it is at once envisaged that the operation of the so-called refining cycles of Estes is at least in relation to the volume of flow liquid, and thus the wash cycles-when there is liquid in the filters/evaporators of Estes, then these filters/evaporators will operate accordingly and thus read over Applicant's claims for

"first, second, and third predetermined conditions" as they are related to wash cycles and/or water content.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Estes.

Estes teaches the claimed invention except fails to stately describe the solvent ratio between the first and second solvent fraction. It is at once envisaged that the solvent ration between these two are most preferably from 9:1 to 99:1 as claimed by applicant because Estes supports that the first solvent is more pure/more clean than the second solvent since the second solvent is diluted with additives/detergent. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the first and second solvent fractions since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Estes as applied to claims 9 and 10 above, and further in view of Berndt et al. herein referred to as "Berndt" (US Patent No. 6,063,135).

Estes teaches the claimed invention except fails to go into detail regarding the use of a replaceable cartridge containing a solid absorption medium in use in the second advanced solvent refining cycle. However, Berndt teaches a dry cleaning system and method in which dry cleaning machinery is used in conjunction with a specific solvent based detergent tailored for optimal cleaning that employs filter, cartridges, carbon/diatomaceous earth, etc. in the latter half of step 2 (col. 8, lines 36-40); this reads on applicant's claims for a solid absorption medium and replaceable cartridges. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a replaceable cartridge containing a solid absorption medium in Estes, as taught by Berndt since Berndt already teaches it is a known and beneficial means of removing particulate and impurities from the solution of such dry clean solvent processing machines (see Berndt).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Estes and Berndt as applied to claim 12 above.

The invention of Estes in view of Berndt teaches the use of a cartridge in the filtration system, but there fail to be specified the exact number of wash cycles that can be optimally performed before replacement of the cartridge. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the number of wash cycles before replacing the cartridge because too little number of uses would be an ineffective use of the cartridge and highly cost inefficient, on the corollary, too many uses would result in a lack of absorption effectiveness and the machine would

not operate effectively. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art, thus optimizing the number of wash cycles performed per cartridge use would have been obvious to one of ordinary skill in the art at the time of the invention. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 4, 5, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Estes, and further in view of Berndt.

Estes teaches the use of gravity filtration, however it would have been obvious to one of ordinary skill in the art at the time of the invention to use a microfiltration system in Estes as well, since microfiltration achieves increased and better filtration. Berndt teaches a filtration system in step 2 of it's dry cleaning solvent processing apparatus; Berndt teaches said filtration step helps to remove the particulate and impurities from the mixture. Firstly it would have been obvious to one of ordinary skill in the art at the time of the invention to have a filter in Estes since it is known and taught in the art by Berndt to be beneficial in achieving good filtering means. It is well known in the art to optimize the exact trans-membrane pressure or cross-flow member diameter of the filter to achieve desired filtering. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the trans-membrane pressure in order to allow constant desired flow therethough and eliminate chocking of the solvent, thus reading on Applicant's claims for a microfiltration system. Microfiltration is not fundamentally different from ultrafiltration of nanofiltration, except in terms of the size of

the molecules if retains; it is known in the art to optimize filter size according the filtration required by the solvent, in this case being dry cleaning solvent. Likewise, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the cross-flow member diameter of the filter to properly eliminate impurities; impurities are undesirable in cleaning agents. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

rrp

MICHAEL BARR
SUPERVISORY PATENT EXAMINER